

3.2 Collecting the Core

- 1) Locate the sampling station with an appropriate field positioning system that provides suitable accuracy (~ 3 to 5 m).
- 2) Measure the water depth using appropriate means, such as a sounding line, marked pole or fathometer.
- 3) Check for secure attachment of the retrieval lines to the core tube mounting clamp.
- 4) Insert a 6.5 ft. length of 2" diameter CAB core tube (core catcher end down) into the mounting clamp and tighten the four wing nuts securely by hand. Make sure clamp is tightened evenly.
- 5) Choose an extension pole of appropriate length (water depth or longer) and insert it into the mounting plate socket; secure it using a 1/4" bolt and locknut.
- 6) Slip the flared lower end of the extension tube over the check-valve end of the core tube adapter, and hold it on by applying upward tension on the retrieval lines. Lower the system vertically (CAB tubing first) into the water to the bottom. Press and vibrate tube into the sediment until it is inserted 6 ft., or until refusal occurs. Note insertion length by markings on extension pole.
- 7) Disengage the extension pole and stow on board sampling vessel.
- 8) Retrieve the core tube containing the sample by pulling on the two retrieval lines, either manually or by using a davit-mounted hand winch.
- 9) Slip the core tube cap over the lower end of the core tube, and secure with duct tape.
- 10) With tube and barrel held vertically in the boat, drill hole in tube just above the top of the sediment column to drain off water.
- 11) Cut off the tube just above the sediment surface and cap the upper end.
- 12) Label the tube lengths with sample station ID codes with a permanent marker. Also, make sure the upper end is marked as such.
- 13) Transport core ashore for processing as soon as possible. Core may be stored within a cooler or enclosed box with bag ice, if it is short enough. This is rarely necessary, unless volatile organics are contaminants of interest.